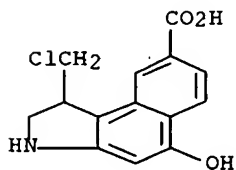


L4 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2003 ACS on STN
 AN 2003:696700 CAPLUS
 DN 139:219341
 TI DNA-binding amide-drug conjugates
 IN Szekely, Zoltan; Hariprakash, Humcha Krishnamurthy; Cholody, Marek W.;
 Michejda, Christopher J.
 PA The Government of the United States of America, Representated by the
 Secretary Department of Health and Human Services, USA
 SO PCT Int. Appl., 50 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003072058	A2	20030904	WO 2003-US6006	20030227
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
PRAI	US 2002-361050P	P	20020227		
	US 2002-370168P	P	20020405		
OS	MARPAT 139:219341				
AB	An amide conjugate comprising a DNA intercalator binds to the minor groove of DNA. A compn. comprising the conjugate and a carrier is useful for treating cancer in a mammal. Thus, 1-(chloromethyl)-5-hydroxy-1,2- dihydro- 3H-benz[e]indole-8-carboxylic acid (CBIr), a rigid DNA alkylator, was prepd. and conjugated to an imidazole-contg. deriv.				
IT	591248-06-5P				
RL:	RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);				
RACT	(Reactant or reagent)				
	(DNA alkylator; DNA-binding polyamide drug conjugates)				
RN	591248-06-5 CAPLUS				
CN	1H-Benz[e]indole-8-carboxylic acid, 1-(chloromethyl)-2,3-dihydro-5-hydroxy-				
	(9CI) (CA INDEX NAME)				



IT 591248-27-0

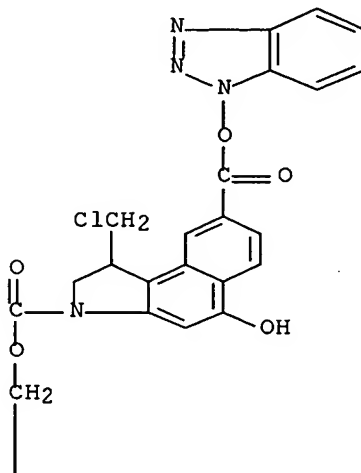
RL: RCT (Reactant); RACT (Reactant or reagent)
(DNA-binding polyamide drug conjugates)

RN 591248-27-0 CAPLUS

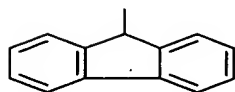
CN 3H-Benz[e]indole-3-carboxylic acid, 8-[(1H-benzotriazol-1-
yloxy)carbonyl]-
1-(chloromethyl)-1,2-dihydro-5-hydroxy-, 9H-fluoren-9-ylmethyl ester
(9CI)

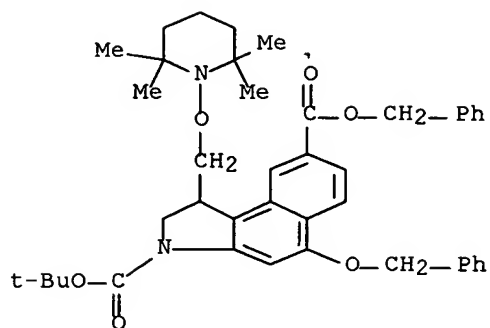
(CA INDEX NAME)

PAGE 1-A



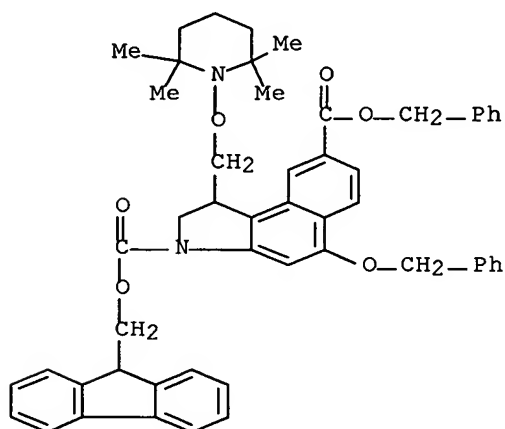
PAGE 2-A





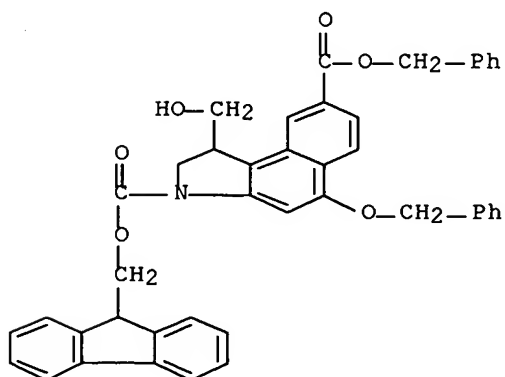
RN 591247-87-9 CAPLUS

CN 3H-Benz[e]indole-3,8-dicarboxylic acid, 1,2-dihydro-5-(phenylmethoxy)-1-[[(2,2,6,6-tetramethyl-1-piperidinyl)oxy]methyl]-, 3-(9H-fluoren-9-ylmethyl) 8-(phenylmethyl) ester (9CI) (CA INDEX NAME)



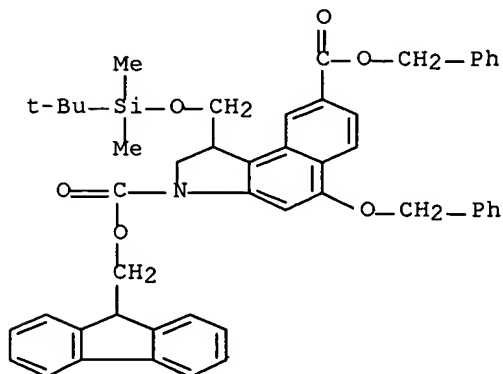
RN 591247-88-0 CAPLUS

CN 3H-Benz[e]indole-3,8-dicarboxylic acid, 1,2-dihydro-1-(hydroxymethyl)-5-(phenylmethoxy)-, 3-(9H-fluoren-9-ylmethyl) 8-(phenylmethyl) ester (9CI) (CA INDEX NAME)



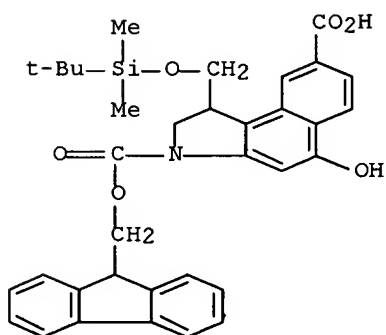
RN 591247-89-1 CAPLUS

CN 3H-Benz[e]indole-3,8-dicarboxylic acid, 1-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]methyl]-1,2-dihydro-5-(phenylmethoxy)-, 3-(9H-fluoren-9-ylmethyl) 8-(phenylmethyl) ester (9CI) (CA INDEX NAME)



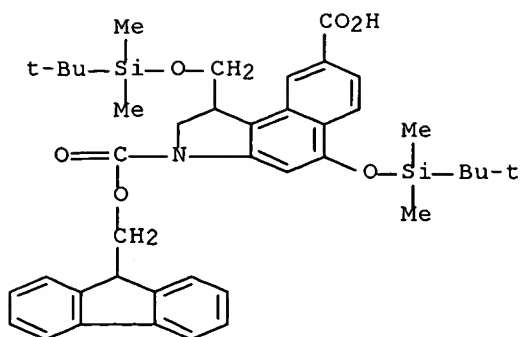
RN 591247-90-4 CAPLUS

CN 3H-Benz[e]indole-3,8-dicarboxylic acid, 1-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]methyl]-1,2-dihydro-5-hydroxy-, 3-(9H-fluoren-9-ylmethyl) ester (9CI) (CA INDEX NAME)



RN 591247-91-5 CAPLUS

CN 3H-Benz[e]indole-3,8-dicarboxylic acid, 5-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]-1-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]methyl]-1,2-dihydro-, 3-(9H-fluoren-9-ylmethyl) ester (9CI) (CA INDEX NAME)

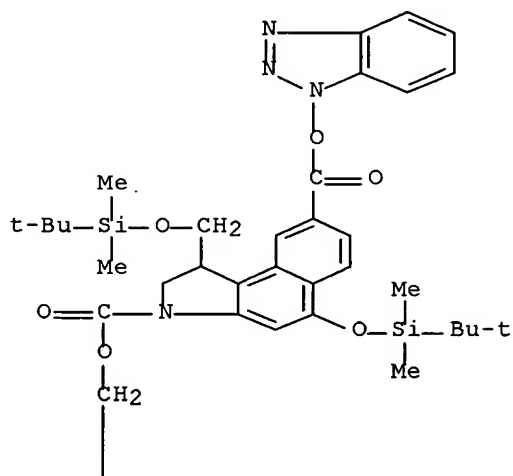


RN 591247-92-6 CAPLUS

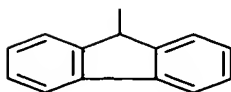
CN 3H-Benz[e]indole-3-carboxylic acid, 8-[(1H-benzotriazol-1-yl)oxy]carbonyl]-

5-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]-1-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]methyl]-1,2-dihydro-, 9H-fluoren-9-ylmethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



L4 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2001:627681 CAPLUS

DN 135:338739

TI Metal cation complexation and activation of reversed CPyI analogues of CC-1065 and duocarmycin SA: partitioning the effects of binding and catalysis

AU Ellis, David A.; Wolkenberg, Scott E.; Boger, Dale L.

CS Department of Chemistry and The Skaggs Institute for Chemical Biology, The Scripps Research Institute, La Jolla, CA, 92037, USA

SO Journal of the American Chemical Society (2001), 123(38), 9299-9306
CODEN: JACSAT; ISSN: 0002-7863

PB American Chemical Society

DT Journal

LA English

AB The synthesis and examn. of a novel class of reversed CPyI analogs of CC-1065 and the duocarmycins are described. Capable of a unique metal cation activation of DNA alkylation, these agents allowed the effects of the DNA binding domain (104-fold increase in DNA alkylation rate and efficiency) to be partitioned into two components: that derived from enhanced DNA binding affinity and selectivity (10-80-fold) and that derived from a contribution to catalysis (250-5000-fold). In addn., the reversed enantiomeric selectivity of these sequence selective DNA alkylating agents provides further strong support for a previously disclosed model where it is the noncovalent binding selectivity of the compds., and not the alkylation subunit or the source of catalysis, that controls the DNA alkylation selectivity.

IT 371248-89-4

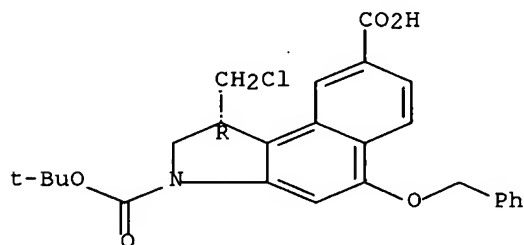
RL: PRP (Properties)

(metal cation complexation and activation of reversed CPyI analogs of CC-1065 and duocarmycin SA)

RN 371248-89-4 CAPLUS

CN 3H-Benz[e]indole-3,8-dicarboxylic acid, 1-(chloromethyl)-1,2-dihydro-5-(phenylmethoxy)-, 3-(1,1-dimethylethyl) ester, (1R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 371248-78-1P

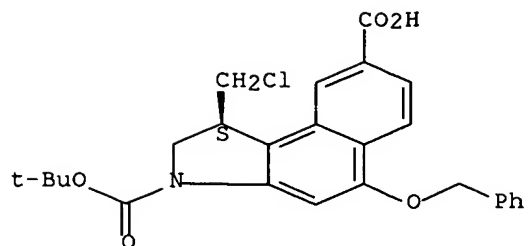
RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(metal cation complexation and activation of reversed CPyI analogs of CC-1065 and duocarmycin SA)

RN 371248-78-1 CAPLUS

CN 3H-Benz[e]indole-3,8-dicarboxylic acid, 1-(chloromethyl)-1,2-dihydro-5-(phenylmethoxy)-, 3-(1,1-dimethylethyl) ester, (1S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 371248-77-0

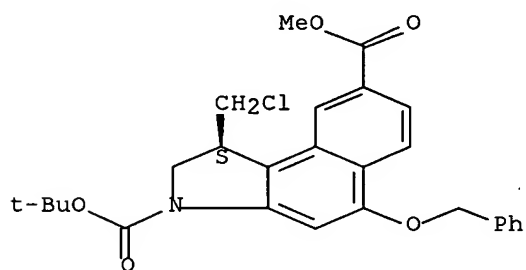
RL: RCT (Reactant); RACT (Reactant or reagent)

(metal cation complexation and activation of reversed CPyI analogs of CC-1065 and duocarmycin SA)

RN 371248-77-0 CAPLUS

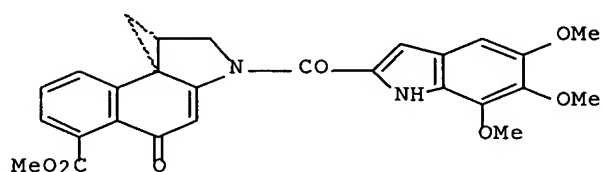
CN 3H-Benz[e]indole-3,8-dicarboxylic acid, 1-(chloromethyl)-1,2-dihydro-5-(phenylmethoxy)-, 3-(1,1-dimethylethyl) 8-methyl ester, (1S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 52 THERE ARE 52 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2003 ACS on STN
 AN 2001:172344 CAPLUS
 DN 134:340376
 TI Synthesis, Chemical Properties, and Biological Evaluation of CC-1065 and Duocarmycin Analogues Incorporating the 5-Methoxycarbonyl-1,2,9,9a-tetrahydrocyclopropa[c]benz[e]indol-4-one Alkylation Subunit
 AU Boger, Dale L.; Hughes, Terry V.; Hedrick, Michael P.
 CS Department of Chemistry and The Skaggs Institute for Chemical Biology, The Scripps Research Institute, La Jolla, CA, 92037, USA
 SO Journal of Organic Chemistry (2001), 66(7), 2207-2216
 CODEN: JOCEAH; ISSN: 0022-3263
 PB American Chemical Society
 DT Journal
 LA English
 OS CASREACT 134:340376
 GI



AB The synthesis of 5-methoxycarbonyl-1,2,9,9a-tetrahydrocyclopropa[c]benz[e]indol-4-one (C5-CO2Me-CBI), a substituted CBI deriv. bearing a C5 methoxycarbonyl group, and its corresponding 5-hydroxymethyl deriv. are described in efforts to establish substituent electronic effects on the agents' functional reactivity and the resulting effect this has on their rate of DNA alkylation. Resoln. of an immediate C5-CO2Me-CBI precursor and its incorporation into both enantiomers of analogs of the duocarmycins are also detailed. A study of the solvolysis reactivity and regioselectivity of N-BOC-C5-CO2Me-CBI (12) revealed that the introduction of a C5 Me ester modestly slowed the rate of solvolysis (1.8.times., pH 3) without altering the inherent reaction regioselectivity (>20:1). The comparison of the X-ray structures of the N-CO2Me derivs. of C5-CO2Me-CBI and CBI revealed correlations with the reaction regioselectivity and the relative reactivity of the compds. The latter correlated well with the less reactive C5-CO2Me-CBI exhibiting a shortened N2-C2a bond length (1.386 vs 1.390 .ANG.) and smaller .chi.1 dihedral angle (8.1.degree. vs 21.2.degree.) indicative of greater vinylogous amide conjugation and was accompanied by a diminished (cross-conjugated) cyclopropane conjugation (shorter bond lengths). Establishment of the DNA alkylation properties revealed that C5-CO2Me-CBI-based agents retained the identical alkylation selectivity of the natural products. More importantly, the C5 Me ester was found to decrease the rate (0.77.times.) of DNA alkylation relative to CBI, consistent with its inherent lower reactivity. These results indicate that the previously obsd. increase in the rate of DNA alkylation for C7-substituted CBI analogs including CCBI (7-cyano-CBI) is contrary

to

expectations based on their inherent reactivities. Unlike (I), in which the C5 Me ester does not bind in the minor groove, the C7 substituent

lies

in the minor groove extending the rigid length of the agents, further enhancing the DNA binding-induced conformational change responsible for activation toward nucleophilic attack and catalysis of the DNA

alkylation

reaction.

IT **337465-84-6P 337465-94-8P**

RL: ADV (Adverse effect, including toxicity); BAC (Biological activity

or

effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)

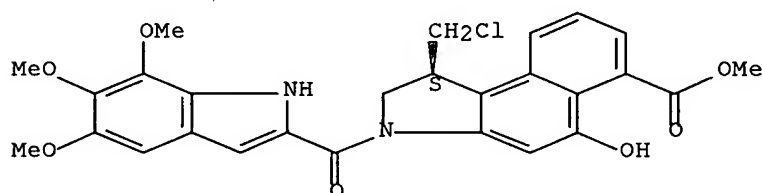
(synthesis, chem. properties, and biol. evaluation of CC-1065 and duocarmycin analogs incorporating the 5-methoxycarbonyl-1,2,9,9a-tetrahydrocyclopropa[c]benz[e]indol-4-one alkylation subunit)

RN 337465-84-6 CAPLUS

CN 1H-Benz[e]indole-6-carboxylic acid, 1-(chloromethyl)-2,3-dihydro-5-hydroxy-

3-[(5,6,7-trimethoxy-1H-indol-2-yl)carbonyl]-, methyl ester, (1S)- (9CI)
(CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

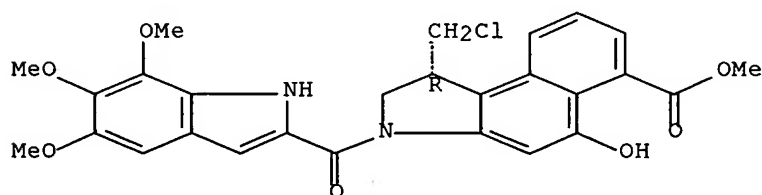


RN 337465-94-8 CAPLUS

CN 1H-Benz[e]indole-6-carboxylic acid, 1-(chloromethyl)-2,3-dihydro-5-hydroxy-

3-[(5,6,7-trimethoxy-1H-indol-2-yl)carbonyl]-, methyl ester, (1R)- (9CI)
(CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



IT **337465-81-3P 337465-91-5P**

RL: PEP (Physical, engineering or chemical process); PUR (Purification

or

recovery); RCT (Reactant); SPN (Synthetic preparation); PREP

(Preparation); PROC (Process); RACT (Reactant or reagent)
(synthesis, chem. properties, and biol. evaluation of CC-1065 and
duocarmycin analogs incorporating the 5-methoxycarbonyl-1,2,9,9a-
tetrahydrocyclopropa[c]benz[e]indol-4-one alkylation subunit)

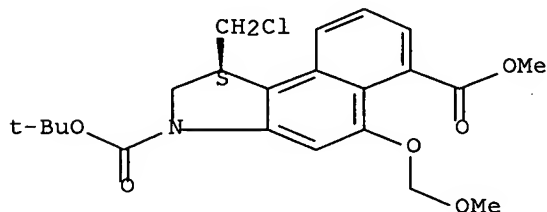
RN 337465-81-3 CAPLUS

CN 3H-Benz[e]indole-3,6-dicarboxylic acid, 1-(chloromethyl)-1,2-dihydro-5-
(methoxymethoxy)-, 3-(1,1-dimethylethyl) 6-methyl ester, (1S)- (9CI)

(CA

INDEX NAME)

Absolute stereochemistry. Rotation (-).



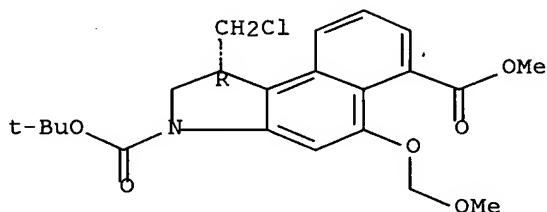
RN 337465-91-5 CAPLUS

CN 3H-Benz[e]indole-3,6-dicarboxylic acid, 1-(chloromethyl)-1,2-dihydro-5-
(methoxymethoxy)-, 3-(1,1-dimethylethyl) 6-methyl ester, (1R)- (9CI)

(CA

INDEX NAME)

Absolute stereochemistry. Rotation (+).



IT **337465-87-9P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);

RACT

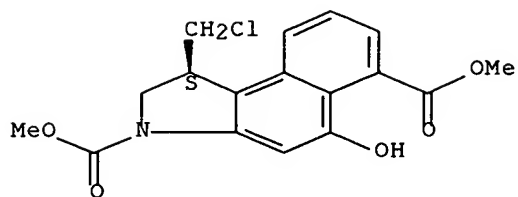
(Reactant or reagent)

(synthesis, chem. properties, and biol. evaluation of CC-1065 and
duocarmycin analogs incorporating the 5-methoxycarbonyl-1,2,9,9a-
tetrahydrocyclopropa[c]benz[e]indol-4-one alkylation subunit)

RN 337465-87-9 CAPLUS

CN 3H-Benz[e]indole-3,6-dicarboxylic acid, 1-(chloromethyl)-1,2-dihydro-5-
hydroxy-, dimethyl ester, (1S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



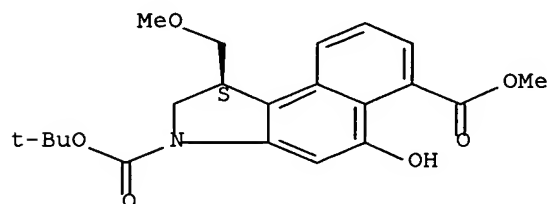
IT 337465-86-8P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (synthesis, chem. properties, and biol. evaluation of CC-1065 and
 duocarmycin analogs incorporating the 5-methoxycarbonyl-1,2,9,9a-
 tetrahydrocyclopropa[c]benz[e]indol-4-one alkylation subunit)

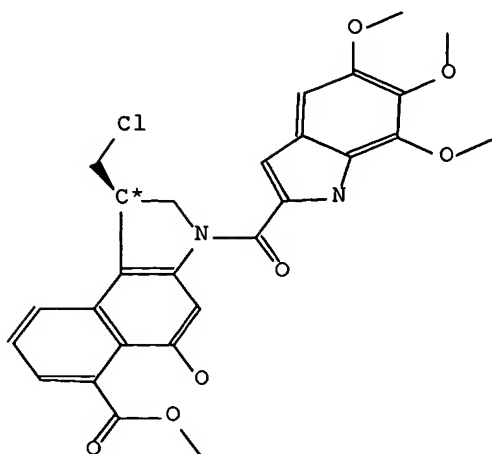
RN 337465-86-8 CAPLUS

CN 3H-Benz[e]indole-3,6-dicarboxylic acid, 1,2-dihydro-5-hydroxy-1-
 (methoxymethyl)-, 3-(1,1-dimethylethyl) 6-methyl ester, (1S)- (9CI) (CA
 INDEX NAME)

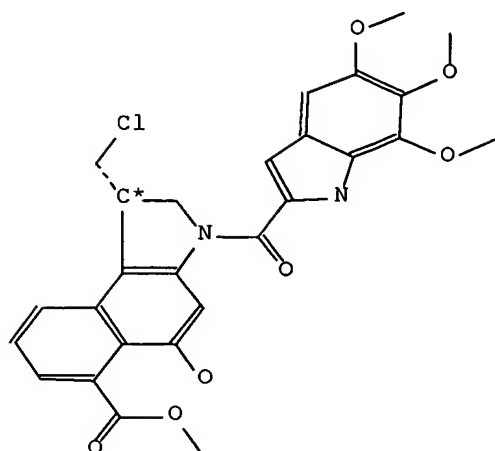
Absolute stereochemistry.



RE.CNT 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT



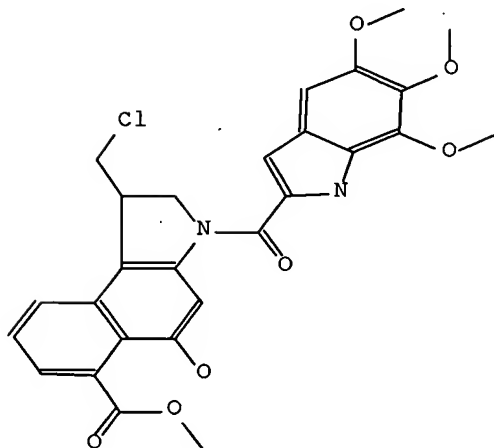
1. Boger, Dale L.; Hughes, Terry V.; Hedrick, Michael P., J.Org.Chem., CODEN: JOCEAH, 66(7), <2001>, 2207 - 2216; BABS-6278585



Reference(s):

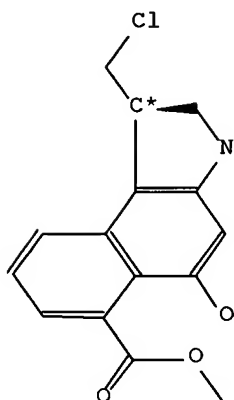
1. Boger, Dale L.; Hughes, Terry V.; Hedrick, Michael P., J.Org.Chem., CODEN: JOCEAH, 66(7), <2001>, 2207 - 2216; BABS-6278585

Beilstein Records (BRN):	8811703
Chemical Name (CN):	3-(5,6,7-trimethoxyindol-2-carbonyl)-1-(chloromethyl)-5-hydroxy-6-methoxycarbonyl-
Autonom Name (AUN):	1,2-dihydro-3H-benz<e>indole 1-chloromethyl-5-hydroxy-3-(5,6,7-trimethoxy-1H-indole-2-carbonyl)-2,3-dihydro-1H-benzo<e>indole-6-carboxylic acid methyl ester
Molec. Formula (MF):	C27 H25 Cl N2 O7
Molecular Weight (MW):	524.96
Lawson Number (LN):	26860, 26736, 289
Compound Type (CTYPE):	heterocyclic
Constitution ID (CONSID):	7459350
Tautomer ID (TAUTID):	8293792
Entry Date (DED):	2001/07/25
Update Date (DUPD):	2001/07/25



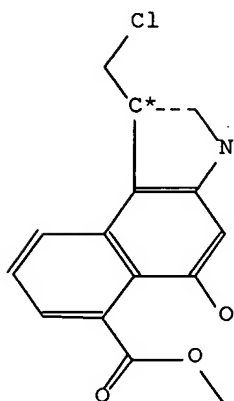
Reference(s):

1. Boger, Dale L.; Hughes, Terry V.; Hedrick, Michael P., J.Org.Chem., CODEN: JOCEAH, 66(7), <2001>, 2207 - 2216; BABS-6278585



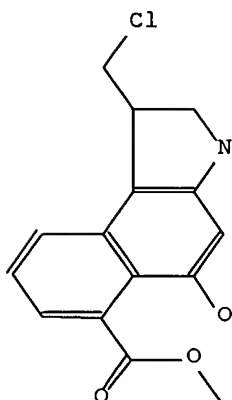
Reference(s):

1. Boger, Dale L.; Hughes, Terry V.; Hedrick, Michael P., J.Org.Chem., CODEN: JOCEAH, 66(7), <2001>, 2207 - 2216; BABS-6278585



Reference(s):

1. Boger, Dale L.; Hughes, Terry V.; Hedrick, Michael P., J.Org.Chem., CODEN: JOCEAH, 66(7), <2001>, 2207 - 2216; BABS-6278585



CM 2

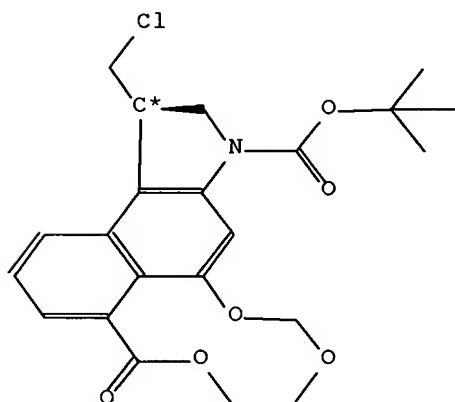
FBRN 1098214

FMF Cl H

Reference(s):

1. Boger, Dale L.; Hughes, Terry V.; Hedrick, Michael P., J.Org.Chem., CODEN: JOCEAH, 66(7), <2001>, 2207 - 2216; BABS-6278585

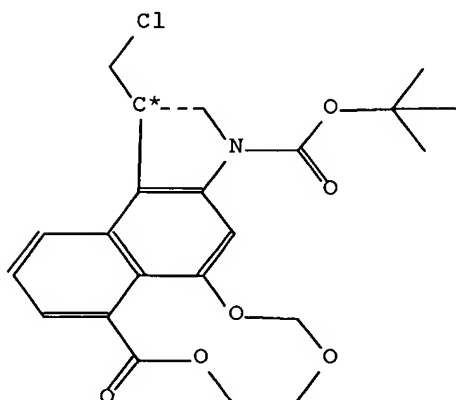
Beilstein Records (BRN):	8800356
Chemical Name (CN):	(+)-(1R)-3-(tert-butyloxycarbonyl)-1-chloromethyl-6-methoxycarbonyl-5-(methoxymethoxy)-1,2-dihydro-3H-benz<e>indole
Autonom Name (AUN):	1-chloromethyl-5-methoxymethoxy-1,2-dihydro-benzo<e>indole-3,6-dicarboxylic acid 3-tert-butyl ester 6-methyl ester
Molec. Formula (MF):	C22 H26 Cl N O6
Molecular Weight (MW):	435.90
Lawson Number (LN):	26736, 1762, 689, 318, 289
File Segment (FS):	Stereo compound
Compound Type (CTYPE):	heterocyclic
Constitution ID (CONSID):	7448796
Tautomer ID (TAUTID):	8273532
Entry Date (DED):	2001/07/25
Update Date (DUPD):	2001/07/25



Reference(s):

1. Boger, Dale L.; Hughes, Terry V.; Hedrick, Michael P., J.Org.Chem., CODEN: JOCEAH, 66(7), <2001>, 2207 - 2216; BABS-6278585

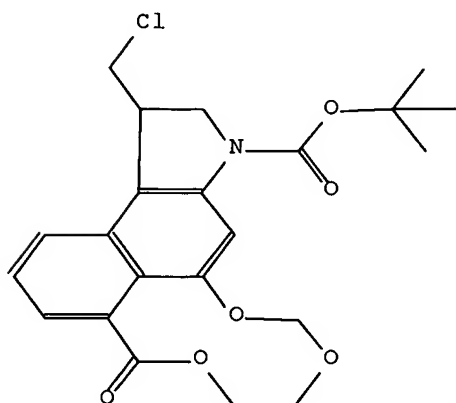
Beilstein Records (BRN):	8800355
Chemical Name (CN):	(-)-(1S)-3-(tert-butyloxycarbonyl)-1-chloromethyl-6-methoxycarbonyl-5-(methoxymethoxy)-1,2-dihydro-3H-benz<e>indole
Autonom Name (AUN):	1-chloromethyl-5-methoxymethoxy-1,2-dihydro-benzo<e>indole-3,6-dicarboxylic acid 3-tert-butyl ester 6-methyl ester
Molec. Formula (MF):	C22 H26 Cl N O6
Molecular Weight (MW):	435.90
Lawson Number (LN):	26736, 1762, 689, 318, 289
File Segment (FS):	Stereo compound
Compound Type (CTYPE):	heterocyclic
Constitution ID (CONSID):	7448796
Tautomer ID (TAUTID):	8273532
Entry Date (DED):	2001/07/25
Update Date (DUPD):	2001/07/25



Reference(s):

1. Boger, Dale L.; Hughes, Terry V.; Hedrick, Michael P., J.Org.Chem., CODEN: JOCEAH, 66(7), <2001>, 2207 - 2216; BABS-6278585

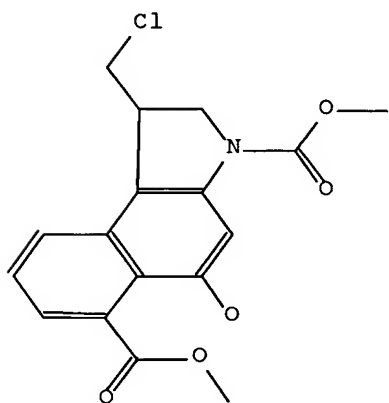
Beilstein Records (BRN):	8798815
Chemical Name (CN):	3-(tert-butyloxycarbonyl)-1-
(chloromethyl)-	6-methoxycarbonyl-5-(methoxymethoxy)-
1,2-	dihydro-3H-benz<e>indole
Autonom Name (AUN):	1-chloromethyl-5-methoxymethoxy-1,2-
	dihydro-benzo<e>indole-3,6-dicarboxylic
	acid 3-tert-butyl ester 6-methyl ester
Molec. Formula (MF):	C22 H26 Cl N O6
Molecular Weight (MW):	435.90
Lawson Number (LN):	26736, 1762, 689, 318, 289
Compound Type (CTYPE):	heterocyclic
Constitution ID (CONSID):	7448796
Tautomer ID (TAUTID):	8273532
Entry Date (DED):	2001/07/25
Update Date (DUPD):	2001/07/25



Reference(s):

1. Boger, Dale L.; Hughes, Terry V.; Hedrick, Michael P., J.Org.Chem., CODEN: JOCEAH, 66(7), <2001>, 2207 - 2216; BABS-6278585

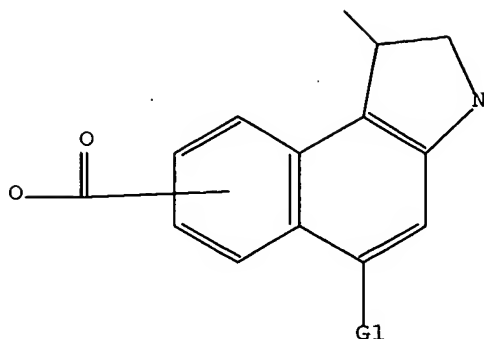
Beilstein Records (BRN):	8792003
Chemical Name (CN):	1-(chloromethyl)-5-hydroxy-3-methoxycarbonyl-6-methoxycarbonyl-1,2-dihydro-3H-benz<e>indole
Autonom Name (AUN):	1-chloromethyl-5-hydroxy-1,2-dihydro-benzo<e>indole-3,6-dicarboxylic acid dimethyl ester
Molec. Formula (MF):	C17 H16 Cl N O5
Molecular Weight (MW):	349.77
Lawson Number (LN):	26736, 1762, 289
Compound Type (CTYPE):	heterocyclic
Constitution ID (CONSID):	7442995
Tautomer ID (TAUTID):	8280273
Entry Date (DED):	2001/07/25
Update Date (DUPD):	2001/07/25



Reference(s):

1. Boger, Dale L.; Hughes, Terry V.; Hedrick, Michael P., J.Org.Chem., CODEN: JOCEAH, 66(7), <2001>, 2207 - 2216; BABS-6278585

=> d l1; d his; log y
L1 HAS NO ANSWERS
L1 STR



G1 O,S,N
G2 C,N

Structure attributes must be viewed using STN Express query preparation.

(FILE 'HOME' ENTERED AT 18:12:26 ON 13 OCT 2003)

FILE 'REGISTRY' ENTERED AT 18:12:33 ON 13 OCT 2003

L1 STRUCTURE UPLOADED
L2 2 S L1
L3 18 S L1 FUL

FILE 'CAPLUS' ENTERED AT 18:12:54 ON 13 OCT 2003

L4 3 S L3

FILE 'BEILSTEIN' ENTERED AT 18:13:25 ON 13 OCT 2003

L5 0 S L1
L6 10 S L1 FUL
L7 10 S L6 NOT L4

FILE 'MARPAT' ENTERED AT 18:14:24 ON 13 OCT 2003

L8 0 S L1
L9 30 S L1 FUL

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	105.75	511.35
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-1.95

STN INTERNATIONAL LOGOFF AT 18:16:40 ON 13 OCT 2003